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Andrew T. Hecht

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EXAMINER

BAIRD, EDWARD J

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/689,833	Applicant(s) HECHT, ANDREW T.	
	Examiner Ed Baird	Art Unit 3695	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-98 is/are pending in the application.
- 4a) Of the above claim(s) 1-16, 18-22, 24-32 and 34-73 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17, 23, 33, and 74-98 is/are rejected.
- 7) ☒ Claim(s) 17, 23, 33 and 98 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant has amended claims 17, 23, 33, 96 and 97. Applicant has added new claim 98. No claims have been canceled. Claims 1 – 16, 18 – 22, 24 – 32, and 34 – 73 were withdrawn and canceled prior to the previous Office Action mailed 20 October 2008. Thus, claims 17, 23, 33, and 74 - 98 remain pending and are presented for examination.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 February 2009 has been entered.

Response to Arguments

2. Applicant's remarks/ arguments filed 24 February 2009 have been fully considered.
3. Examiner acknowledges amendments to **claim 97** to overcome claim objection and, in turn, withdraws objection.
4. Applicant argues **Florance** does not disclose “a method for providing a daily cash index for real estate transaction values” as recited in independent claim 23 of the present invention [Remarks page 9, lines 4 – 6]. Applicant also argues that there is no support in **Florance** that the “daily service updates over the Internet” as described in paragraph [0052] of the *Florance* is in any way a teaching of the generation of “for each day, generating a daily cash index . . .” as recited in claim 17 and 23 of the present (instant) invention; and that the daily service updates of the **Florance** patent appear to merely

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relate database updates in support of a "wide array of digital service offerings" [Remarks page 10, last paragraph – page 11, top of page]. However, Examiner respectfully disagrees.

Examiner asserts it would have been obvious to one having ordinary skill in the art at the time of the instant invention to use *"daily service updates over the Internet"* and apply such to updating indexes on a daily basis. The fact that the daily service updates of the **Florance** appear to merely relate database updates in support of a "wide array of digital service [other] offerings" is irrelevant based on being obvious to combine.

5. Applicant argues that **Florance** does not show or teach *"generating a daily cash index of real estate transaction values in the local region based upon the survey by compiling the data obtained from the survey of actual real estate transactions into a series of data points; and for each day, calculating the price per unit area for the local sector; the price per unit area for the local sector being usable as a cash mark to market settlement value"* [Remarks page 9, lines 6 – 12, inter alia]. However, Examiner respectfully disagrees.

The subject matter of a properly construed claim is defined by the terms that limit its scope. It is this subject matter that must be examined. As a general matter, the grammar and intended meaning of terms used in a claim will dictate whether the language limits the claim scope. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. The following are examples of language that may raise a question as to the limiting effect of the language in a claim:

- (A) statements of intended use or field of use,
- (B) "adapted to" or "adapted for" clauses,
- (C) "wherein" clauses, or

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(D) "whereby" clauses.

This list of examples is not intended to be exhaustive. See also MPEP § 2111.04.

Descriptive language such as *daily, in the local region, for each day, for the local sector, etc.* are statements of intended use and, as such, do not limit the scope of the claims.

6. Applicant argues **Florance** description of a *data collection and distribution system that "supports derivatives for commercial real estate by providing sufficiently accurate market information that supports the creation of indexes and derivatives such as futures or hedge rental rates and occupancy rates" [0105]* is not *"for each day . . ."* as recited in Applicant's claim 23 [Remarks page 11, 1st full paragraph paragraph]. However, Examiner respectfully disagrees based on the discussion of intended use, above.

7. Applicant's discussion on known indices prior to the present invention were generated and calculated on a monthly basis [Remarks page 11 last paragraph – page 12, 1st full paragraph] and a benefit of generating a daily cash index [Remarks page 12, 2nd full paragraph] is irrelevant. The claims are interpreted in light of the claim language of the instant application.

8. Applicant argues that neither **Florance** nor **Kevenides** disclose *"a method for providing a daily cash index for real estate transaction values" as recited in independent claims 17 and 33 of the present (instant) invention* [Remarks page 14, top of page]. However, Examiner respectfully disagrees based on the discussions above.

9. Applicant argues **Kenevides** also fails to teach or show *"generating a volatility value based upon the monthly cash indices over at least one year as a measure of historical performance" as recited in claim 17 of the present invention* [Remarks page 15, lines 2 - 4]. However, Examiner respectfully disagrees.

Kenevides teaches calculating a Value at Risk (VAR) which is an “amount of money an institution could make or lose from changes in the price of the underlying assets” [**Kenevides** page 2, last paragraph]. He further discloses that the VAR concept incorporates the volatility of the underlying prices [Id.]. Examiner affirms that VAR is analogous to Applicant’s **volatility value**. Applying the **volatility value** to real estate market based upon *monthly cash indices over at least one year as a measure of historical performance* is taught by the **Rothstein** reference as presented in the rejection below.

10. Applicant argues **Kenevides** also fails to teach or show “*for each month, aggregating the daily surveys on a monthly basis to generate a monthly cash index for said each month; and d.* (Examiner thinks Applicant means limitation **f.**), *updating the volatility value based upon each monthly cash index generated in step e*” as recited in claim 33 of the present (instant) invention [Remarks page 15, lines 5 – 10]. However, Examiner respectfully disagrees.

First, Examiner cited **Florance**, not **Kenevides**, as teaching the first limitation mentioned here. Second, **Florance** clearly teaches “continuously updating the marketplace data” and “each day thousands of updates to the marketplace database are made” [0054]. Examiner affirms that such updating is analogous to Applicant’s *updating the volatility value* in light of the above discussion regarding the obviousness to update the indexes on a daily basis.

11. Applicant argues that the building and updating a database as described in the **Florance** *is not utilization of the information maintained in a database to generate an index on a daily basis as recited in claim 98* [Remarks page 17, mid-page]. However, Examiner respectfully disagrees as previously discussed regarding intended use.

12. Applicant re-iterates arguments that **Florance** does not teach *generating “for each day, generating a daily cash index . . .”* [Remarks page 17, last paragraph – page 18, 2nd

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full paragraph]. However, Examiner respectfully disagrees based on above previously-stated discussion.

13. Applicant's discussion regarding the state of the art at the time of the present (instant) invention (i.e. to calculate monthly indices as in the Case Shiller Indices and not "for each day, generating a daily cash index . . ." – claim 23) [Remarks page 18, last full paragraph] and discussion regarding the Declaration of Andrew T. Hecht [Remarks page 19, mid-page] are irrelevant based on the above discussion regarding claim interpretation.

14. Applicant's other arguments filed with respect to **claims 17, 23, 33, and 74 – 97** regarding the 35 U.S.C. § 103(a) rejections have been fully considered. In light of the amended limitation (independent claims 17, 23, and 33):

- for each day, generating a daily cash index of real estate transaction values in the local region based upon the survey by compiling the data obtained from the survey of actual real estate transactions into a series of data points; for each day, manipulating the series of data points by statistical tools to create a normal distribution of rate prices per unit area; and for each day, calculating the price per unit area for the local sector; the price per unit area for the local sector being usable as a cash mark to market settlement value.

arguments are moot in view of the new ground(s) of rejection.

Claim Objections

15. **Claims 17, 23, 33 and 98** are objected to for the following reasons:

The limitation:

- for each day, generating a daily cash index of real estate transaction values . . .
- is not clear to the Examiner what the Applicant is trying to convey. The terms "for each day" and "daily" are redundant. For purposes of evaluation, the term "for each day"

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in this limitation will be interpreted as not further limiting. Appropriate correction is required.

Similarly, the limitations in **claims 17, 23, and 33**:

- for each day, calculating the price per unit area for the local sector;
- the price per unit area for the local sector being usable as a cash mark to market settlement value.

also appear to be redundant in light of the definition of “mark-to-market” in the instant application [0074]. “Mark-to-market” indicates pricing of securities or commodities being valued each day. For purposes of evaluation, the limitation:

- the price per unit area for the local sector being usable as a cash mark to market settlement value.

will be interpreted as not further limiting. Appropriate correction is required.

Claim Rejections - 35 USC § 101

16. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

17. Claims 17, 23, 33, and 74 - 98 are rejected under 35 U.S.C. §101 because they are directed to non-statutory subject matter.

18. **Claims 17, 23, 33, and 74 - 98**, method claims, are rejected under 35 U.S.C. §101 because, in order to comply with §101 a process/ method must (1) be tied to a particular machine or apparatus, or (2) transform underlying subject matter (such as an article or materials) to a different state or thing.

The methods recited in the claims fail to (1) be tied to a particular machine or apparatus, or (2) transform underlying subject matter to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972).

There are two corollaries to the machine-or-transformation test. First, a mere field-of-use limitation is generally insufficient to render an otherwise ineligible method claim patent eligible. This means the machine or transformation must impose meaningful limits on the method claim's scope to pass the test. Second, insignificant extra-solution activity will not transform an unpatentable principle into a patentable process. This means reciting a specific machine or a particular transformation of a specific article in an insignificant step, such as data gathering or outputting, is not sufficient to pass the test.

There is no recitation within the claims to indicate that the steps that comprise the method are nothing but mental steps performed within the mind of a person. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Claim Rejections - 35 USC § 112

19. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

20. Claims 17, 23, and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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21. Regarding **claims 17, 23, and 33**, the limitation:

- for each day, generating a daily cash index of real estate transaction values . . .

is not clear to the Examiner what the Applicant is trying to convey. The terms “for each day” and “daily” are redundant. For purposes of evaluation, the term “for each day” in this limitation will be interpreted as not further limiting. Appropriate correction is required.

Similarly, the limitations:

- for each day, calculating the price per unit area for the local sector;
- the price per unit area for the local sector being usable as a cash mark to

market settlement value.

also appear to be redundant in light of the definition of “mark-to-market” in the instant application [0074]. “Mark-to-market” indicates pricing of securities or commodities being valued each day. For purposes of evaluation, the limitation:

- the price per unit area for the local sector being usable as a cash mark to

market settlement value.

will be interpreted as not further limiting. Appropriate correction is required.

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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23. Claims 17, 23, 33, 78-81, 86, 91, 92, and 95 are rejected under 35 U.S.C. 103 (a) as being unpatentable over **Florance, et al** (US Pub. No. 2002/0065739) as supplied by Applicant, in view of **Opsahl-Ong** (US Pub. No. 2003/0078878) in further view of **Kevenides** ("International real estate investment risky analysis", Real Estate Issues, Chicago: Fall 2002. Vol. 27, Iss. 3/4; pg. 61, 13 pgs), in further view of **Rothstein et al** (US Patent No. US 6,058,369).

24. Regarding **claims 17 and 23**, **Florance** teaches:

- for each day, performing a survey of actual real estate transactions executed on said day in a local region [see at least 0038, 0039, 0052 – 0054 and 0436].

Examiner interprets *identifying and targeting the most likely tenants* [0038] and finding and evaluating commercial properties [0039] as analogous to Applicant's **performing a survey**.

- generating a **daily** [see at least 0052 and 0054] cash index of real estate transaction values in the local region based upon the survey by compiling the data obtained from the survey of actual real estate transactions into a series of data points [see at least 0105];
- for each day, calculating the price per unit area [0106 and 0204 – price per square foot] for the local sector [0106 – such as "Washington, suburban]; the price per unit area for the local sector being usable as a cash mark to market settlement value.

Examiner interprets *creation of indexes* as analogous to Applicant's **generating a daily cash index**. Although **Florance** does not explicitly disclose generating a **daily** (emphasis added) cash index as such, Examiner notes that it would have been obvious to one having ordinary skill in the art at the time of the instant invention to apply *daily updates*

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to the marketplace database to generating a cash index in that the such data is available at such a frequency.

Florance teaches:

- for each month, aggregating the daily surveys on a monthly basis to generate a monthly cash index [0054].

Examiner interprets *continuously assembled and updated* as equivalent to

Applicant's **aggregating the daily surveys**.

Florance does not explicitly disclose:

- for each day, manipulating the series of data points by statistical tools to create a normal distribution of rate prices per unit area.

However, **Opsahl-Ong** discloses a system and method for evaluating future financial performance of a commercial real estate property [see at least Abstract and 0002]. She discloses an embodiment comprising a means for determining a series of stochastic values including those for interest rate values, market rent values, and vacancy values associated with the property over a period of time [0011]. She discloses a means for predicting debt service coverage ratio information associated with the property based on the stochastic values, wherein said determinations of the stochastic values are repeated, and the predicting is performed in accordance with a Monte Carlo simulation; and means for evaluating a potential loan based on the debt service coverage ratio information [Id.]. A formula associated with a probability distribution such as a normal distribution, is used to randomly generate such stochastic values [0040].

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the instant invention to modify **Florance's** disclosure to include *normal probability distribution* as taught by **Opsahl-Ong** because such analysis is used when dealing with

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any random, semi-random, or pseudorandom information or information predicted based on chance and/or probability [**Opsahl-Ong** 0028].

Neither **Florance** nor **Opsahl-Ong** explicitly discloses:

- generating a **volatility value** as a measure of historical performance.

However, **Kevenides** discloses challenges of international real estate investment involving country funds [page 2, last three paragraphs]. **Kevenides** further discloses *Value at Risk* (VAR) which is the amount of money an institution could make or lose from changes in the price of the underlying assets; VAR is a statistical estimate based on historical data [page 2, last paragraph]. Examiner interprets *Value at Risk* (VAR) as Applicant's **volatility value**.

Examiner interprets *historical data* as Applicant's **indices** over at least one year. This is evident in **Kevenides'** disclosure that the length of the chosen historical period has an impact on calculating value at risk [page 3, 2nd – 5th paragraph]. He discloses under MEASURING, ANALYZING, AND FORECASTING RISKS [page 6], periods in history which were innovative and productive included the first-half of the 20th century as well as the 1990's [page 6, 6th paragraph].

Therefore, it would have been obvious to a person having an ordinary skill in the art at the time of the instant invention to modify **Florance's** disclosure to include *Value at Risk* (VAR) as disclosed by **Kevenides** because an individual or institution investing real estate can use VAR as a measure of potential losses rather than measure of potential gains [**Kevenides** page 2, last paragraph].

Examiner notes that **Kevenides** does not explicitly disclose:

- generating the volatility value “based upon the monthly cash indices over at least one year as a measure of historical performance” (emphasis added).

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However, **Rothstein** teaches method of deriving a market index by gathering data applicable to real estate transactions [Abstract]. **Rothstein** teaches analyzing volatility in a real estate market, over a compilation period of one year, with a market index calculated each month or, alternately, semiannually, biweekly, weekly or even daily [column 3, lines 37 – 59].

Therefore, it would have been obvious to a person having an ordinary skill in the art at the time of the instant invention to modify **Kevenides**' disclosure to include generating a volatility value *based upon the monthly cash indices* as disclosed by **Rothstein** because such volatility factors may be used to track the housing industry and related employment opportunities for those who rely upon the real estate market for their livelihood [**Rothstein** column 1 lines 20 - 33].

25. Regarding **claim 33**, **Florance**, **Opsahl-Ong**, **Kevenides** and **Rothstein** teach all the limitations of claim 17 which are also included in this claim. In addition, **Florance** teaches:

- based upon historical data, generating monthly cash indices of real estate values in a **local region** [see paragraph 0078 - geographic region]; for each month of at least 10 prior years [see paragraph 0257 - analyze transactions over a long period of time (e.g. ten years) to provide valuable historical performance data].
- generating a initial volatility value based upon the monthly cash indices over said at least **10 prior years** [see paragraph 0257];
- updating the volatility value based upon each monthly cash index generated (as described) – [see paragraph 0054].

26. Regarding **claim 78**, **Florance** teaches real estate transaction as inclusive of residential real estate [see at least 0088].

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27. Regarding **claims 79 and 80**, the limitations:

- the daily cash index is aggregated on a monthly basis to provide a monthly index value, and
- generating a volatility value of the daily cash index, said volatility value being a function of a historic performance of the daily cash index

further limit claim 23, which is broader than claim 17. However, these limitations are substantially similar to limitations of claim 17 as were discussed in the rejection of claim 17 above.

28. Regarding **claim 81**, the limitation:

- the historic performance is a function of aggregated monthly values of the daily cash index over a **plurality of years**.

is disclosed by **Florance** as discussed in the rejection of claim 33.

29. Regarding **claims 86 and 91**, **Florance** teaches the limitations

- the real estate transactions include **residential** real estate transactions [see at least 0088]; and
- the real estate transactions include **residential** real estate transactions and the real estate values include **residential** real estate values [see at least 0088].

30. Regarding **claim 92**, the limitations:

- periodically aggregating the daily surveys to generate a periodic cash index;
- generating a volatility value based upon the periodic cash indices over a plurality of years.

further limit independent claim 23 so as to render this claim substantially similar to independent claim 17. Therefore, this claim is rejected for the same reasons as claim 17.

31. Regarding **claim 95**, **Florance** teaches:

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- the daily cash index is calculated as a price per square foot [see paragraph 0133 and 0134].

Examiner notes that *stored data representing square footage* is indicative of Applicant's **daily cash index calculated as a price per square foot** [0106].

32. Claims 74, 75, 77, 82, 83, 85, 87, 88, 90, 93, 94, 96, and 97 are rejected under 35 U.S.C. 103 (a) as being unpatentable over **Florance** in view of **Opsahl-Ong**, in further view of **Kevenides**, in further view of **Rothstein**, as applied to claims 17, 23 and 33 above, and further in view of **Official Notice**.

33. Regarding **claims 74, 75, 82, 83, 87, and 88** the limitations that the daily cash index is calculated on

- a weighted average basis, or
- a moving average basis

are standard numerical techniques used in the financial industry. Examiner takes **Official Notice** that these numerical techniques are old and well known.

Therefore, it would have been obvious to a person having an ordinary skill in the art at the time of the instant invention to modify **Florance's** disclosure to include a *weighted average basis* or a *moving average basis* for calculating the daily cash index because these are standard numerical techniques used in the financial industry.

34. Regarding **claims 77, 85, and 90**, the limitations that the daily cash index is weighted according to building classes (i.e. Class A buildings, Class B buildings, and Class C buildings) are old and well known in the real estate industry. Examiner takes **Official Notice** that buildings are classified as Class A, Class B, or Class C buildings due to their desirability (i.e. ability to attract higher quality tenants) in commercial real estate.

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Therefore, it would have been obvious to a person having an ordinary skill in the art at the time of the instant invention to modify **Florance's** disclosure to include *building classes* for calculating the daily cash index because the volatility value would be a strong function of the ability to find and keep higher quality commercial tenants.

35. **Claim 93 and 94** are substantially similar to claim 92 excepting that a volatility factor is being generated based on weekly and biweekly cash indices. Examiner takes **Official Notice** that generating "factors" based on a **weekly** or **biweekly** data as opposed to "**periodic**" or **monthly** data is often applied in basic business methods. An example of this is paying of a company's employees. Some companies pay employees weekly, some biweekly, some monthly. One of ordinary skill in the art at the time of **Florance's** disclosure would be aware of such business practices.

Therefore, it would have been obvious to a person having an ordinary skill in the art at the time of the instant invention to modify **Florance's** disclosure to include generating "factors" based on a **weekly** or **biweekly** data because a user would be able to generate a volatility factor if market conditions change more quickly.

36. **Regarding claims 96 and 97**, the limitations:

- the price per unit is indicated as a price per square foot, a price per square meter, price per acre and a price per hectare.

are standard units of measure in real estate valuation. Examiner takes **Official Notice** that expressing prices in these units are old and well known.

Therefore, it would have been obvious to a person having an ordinary skill in the art at the time of the instant invention to modify **Florance's** disclosure *to price real estate based on square footage, square meters, or acreage* because these are standard units of measure used in real estate investment.

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37. Claims 76, 84, and 89 are rejected under 35 U.S.C. 103 (a) as being unpatentable over **Florance** in view of **Opsahl-Ong**, in further view of **Kevenides**, in further view of **Rothstein**, as applied to claims 17, 23 and 33 above, and further in view of **Hoadley** ("Options Strategy Analysis Tools", website www.hoadley.net/options/BS.htm. December 18, 2002).

38. Regarding **claims 76, 84, and 89**, neither **Florance**, **Opsahl-Ong**, **Kevenides**, nor **Rothstein** discloses calculating the daily cash index on an exponential moving average basis.

However, **Hoadley** discloses determining volatility of option prices using an *exponentially weighted historical volatility* estimation using the EWMA (exponentially weighted moving average) model [page 2, bottom – page 3, top]. Examiner interprets *exponentially weighted moving average* Applicant's **exponential moving average**.

Therefore, it would have been obvious to a person having an ordinary skill in the art at the time of the instant invention to modify **Florance's** disclosure to include *exponentially weighted moving average* as disclosed by **Hoadley** to calculate the daily cash index because the *exponentially weighted moving average* model gives greater emphasis to more recent prices [**Hoadley** page 3, top].

39. Claim 98 is rejected under 35 U.S.C. 103 (a) as being unpatentable over **Florance**.

40. Regarding **claim 98**, **Florance** teaches:

- for each day, performing a survey of actual real estate transactions executed on said day in a local region [see 0038, 0039, 0052 – 0054, and 0436];
- generating a daily cash index of real estate transaction values in the local region based upon the survey [see at least 0105], the daily cash index being expressed as a price per unit – [0106 and 0204 –price per square foot] – and usable as a daily

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settlement value in a real estate based securities market [see at least 0052, 0105 and 0106 – clients receive daily service updates, 0052 and 0054].

Examiner interprets *creation of indexes* as analogous to Applicant's **generating a daily cash index**. Although **Florance** does not explicitly disclose generating a **daily** (emphasis added) *cash index* as such, Examiner notes that it would have been obvious to one having ordinary skill in the art at the time of the instant invention to apply "*daily updates to the marketplace database*" to generating a cash index in that the such data was available at such a frequency.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ed Baird whose telephone number is (571)270-3330. The examiner can normally be reached on Monday - Thursday 7:30 am - 5:00 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles R. Kyle can be reached on 571-272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Ed Baird/
Examiner, Art Unit 3695

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